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## A NEW GENUS AND SOME NEW SPECIES AND SUBSPECIES OF NEOTROPICAL HESPERIIDAE (LEPIDOPTERA, RHOPALOCERA)

By Ernest L. Bell

The insects that are described on the following pages of this paper have been received by the American Museum of Natural History from various sources, but nearly all of those from localities in Colombia are from the generous donations of Mr. Frank Johnson, as is also the one from Mexico which was in the unidentified material of the C. C. Hoffmann Collection.

All of the type material mentioned in this paper is in the collection of the American Museum of Natural History except one paratype which is noted in its place.

Where reference is made to the venation of the wings by number, it follows the English system of numbering the veins of each wing from the lowest vein upward.

#### Phocides johnsoni, new species

Figure 1

#### MALE

On the upper side the ground color of both wings is black. The primaries have 10 white hyaline spots, of which five are subapical and consist of two fairly large ones in interspaces 5 and 6 and three small ones in interspaces 7, 8, and 9; three discal spots, of which one is in the cell and one each in interspaces 1 and 2, forming an oblique line towards the inner angle: two outer spots, one each in interspaces 3 and 4. midway between the discal band and the subapical spots. The basal blue rays are all well developed, the upper one extending far along the upper edge of the cell and the lower ones not quite reaching the discal band of hyaline spots. There is a short blue stripe just above the two outer hyaline spots and a series of eight small submarginal blue spots. The fringes are black.

The secondaries have five blue rays, of

which the upper one begins on vein 7 at about the basal third of that vein, the lower four rays begin from the base of the wings, and the upper one of these four rays apically merges with the next ray below it. The ray along the edge of the abdominal fold tends to become bluish white at its lower extremity. There is a submarginal band of blue spots which are interrupted in interspace 4.

On the under side the ground color of the wings is black. On the primaries the hyaline spots of the upper side are repeated. There are some blue scales at the base of the costal margin, and there is a blue spot from the costal margin across the cell into the base of interspace 2: there is a small blue stripe over the hyaline cell spot and another one over the two outer hyaline The veins separating the middle spot of the hvaline discal band from the spots above and below it are also scaled with blue. There are four blue spots forming a submarginal band, the two upper ones are small and in a line with the lower hvaline subapical spot, the two lower ones are larger and in a line with hyaline spot in interspace 3. There is a short blue stripe along the upper side of vein 1, under the hyaline spot in interspace 1. Below vein 1 the ground color is paler brownish.

The secondaries have three blue bands and a blue stripe along the body and the inner margin. The inner one of the three blue bands extends somewhat curved from the base of the wings to the middle of the inner edge of the abdominal fold; the next blue band is subbasal and slants outward to vein 4; the other blue band is submarginal and it is interrupted in interspace 4. The fringes are white, crossed by black at the end of the veins.

On the upper side the head is black crossed by three narrow blue lines. collar and the shoulder covers are black. and each has a central blue line. The The thorax and the base tegulae are blue. of the abdomen are scaled with blue: the rest of the abdomen is black with the segments narrowly edged with blue. under side the palpi are white: the pectus is white in the center and black on the sides; the thorax is black striped with white: the abdomen is black in the center and white on the sides. The antennae are black on both sides.

LENGTH OF ONE PRIMARY WING: 27 mm. TYPE MATERIAL: The holotype male is from R. San Joaquin, Cauca, Colombia, 1500 meters, June, 1946 (K. von Sneidern). This beautiful species is named for Mr.

Frank Johnson.

On the upper side of the wings this species may be distinguished from other *Phocides* species having a similar superficial appearance, by the greatly developed basal blue rays of the primaries and the somewhat deeper blue color of these rays, and by the blue rays of the secondaries being all entirely blue except the lower extremity of the abdominal ray which is bluish white. In the closely allied continental species having similar rays on the secondaries, some of the rays are white or only tinged with blue.

There is some resemblance between johnsoni and Phocides urania Westwood and Hewitson from Mexico and Guatemala, but in urania the subapical spots of the primaries are placed somewhat differently and all of the rays and bands of both wings are green and not blue. The male genitalia of johnsoni are very similar to those of urania.

## Codatractus amazonensis, new species

#### Figure 2

#### MALE

The ground color of the upper side of both wings is dark brown. The primaries have a light overscaling of fulvous in the basal area and along the inner margin. There are 10 white hyaline spots, of which three are subapical in an oblique line, the upper two are a little elongate and the lower one is ovate; five form a discal band from near the costal margin to near the outer margin in interspace 1, the spot on the costal margin is small and quadrate, the three spots below it are larger and excised on their outer sides, the fifth spot is near the base of interspace 3 and is small and quadrate; the last two spots are in interspaces 4 and 5 below the subapical spots, and both of them are minute. In interspace 1 the fringes are sordid whitish, and above there they are brown.

The secondaries are overscaled with dull fulvous below vein 7. There is a somewhat irregular dark brown discal band and a short, indistinct, subbasal band. The fringes are a little paler than the ground color of the wings and are crossed by darker brown at the end of the veins.

On the under side of the wings the ground color is nearly as dark as on the upper side. On the primaries the ground color shades to a little paler towards the outer margin of the wings, and in this area the black veins are a little contrasted. The hyaline spots of the upper side are repeated. All of the space below vein 1 to the inner margin is pale yellowish white. Along the outer margin there is a scattered overscaling of pale yellowish which accumulates to form small, ill-defined spots at the apex of the wings and on the base of the fringes in some of the interspaces below the apex.

The secondaries are lightly overscaled with pale yellowish which accumulates to form a short, hazy, subbasal band, an ill-defined spot in the cell, and an irregular submarginal band of spots. At the anal angle there is a hazy, darker spot. The abdominal fold contains a shallow pouch extending from near the base of the fold for about one-half its length, and this pouch is lined with whitish scales and contains a brush of moderately long, orange brown, hair-like scales arranged in an oblique row, slanting outward and downward. The fringes are as on the upper side.

The upper side of the head and the body is dark brown with intermixed fulvous scales. On the under side the palpi and pectus are fulvous and brown intermixed, and there is a pale yellow spot below each eye. The thorax is dull fulvous and brown, the abdomen is yellowish fulvous with a dark central line. The clubs of the antennae are missing, but what is left of the shafts are black on the upper side and on the under side are spotted with pale yellowish at each joint.

#### FEMALE

On the upper side the ground color of the wings is a little paler than that of the male. and the fulvous overscaling is a little heavier, especially on the secondaries. the primaries there are only nine white hvaline spots, the one in interspace 5 of the male being absent, the lower subapical spot is very minute which causes it to appear to be removed well outward of the upper two, the spot near the space of interspace 3 is also very small, and the spot in interspace 4 is so small that it barely can be seen without a lens. The fringes are as in the male. The two dark bands of the secondaries are more plainly seen than in the male.

The under side of the primaries differs from that of the male only in the slightly paler ground color and in the lack of the hyaline spot in interspace 5. On the secondaries the yellow bands are more prominent, and the upper spot of the subbasal band is large and bright; there is a discal band of these spots instead of just a cell spot as in the male. The submarginal yellow band and the dark anal spot are as in the male.

The allotype female has one entire antenna which shows that the club is barely thicker than the shaft and that it curves into a long, tapering apiculus which is sharply pointed at the apex. The under side of the club and the apiculus is pale yellow.

LENGTH OF ONE PRIMARY WING: Male and female, 23 mm.

Type Material: The holotype male is from Leticia, Amazonas, Colombia, May, 1946 (L. Richter); the allotype female is from Rio Tapajoz, Brazil.

It is doubtful that *amazonensis* really belongs in *Codatractus*, as the primaries are more rounded on the outer margin, the antennal club is thinner and the apiculus

longer, and the brush of hairs on the under side of the abdominal fold is not possessed by the other members of the genus. However, we are disinclined to erect a monotypical genus for amazonensis and provisionally place it in the genus Codatractus where it should easily be recognized because of its close superficial resemblance to other members of the genus, especially imalena Butler. On the upper side of the primaries amazonensis may be immediately distinguished from imalena by the position of the hyaline spot in interspace 3. amazonensis this spot is close to the base of the interspace and appears to form part of the discal band of hyaline spots, while in imalena the spot in interspace 3 is removed well outward and does not form part of the The maculation of the under discal band. side of the secondaries is very different in the two species, and the males of imalena do not have the brush of hairs in the abdominal fold.

#### Gorgopas viridiceps sneiderni, new subspecies

#### MALE

This subspecies differs from typical viridiceps Butler and Druce in having a heavy overscaling of grayish white on the under side of the secondaries, which varies among individuals in the extent of the area covered by these scales; in some specimens it is more than half of the lower part of these wings and in others it is a little less than half.

#### FEMALE

There is only one worn specimen of this sex at hand and on the upper side it is similar to the male. On the under side of the secondaries the grayish white overscaling is reduced in area; it is very heavy in the abdominal fold from where it extends to the lower part of the discal area in more or less scattered scales.

LENGTH OF ONE PRIMARY WING: Male, 18-20 mm.; female, 19 mm.

Type Material: All from Colombia. The holotype male is from San Jose, Cauca, 2200 meters, east side of the western Andes, June, 1946. The allotype female is from

Gallera, June-July, 1911. Paratypes: Thirty males from San Jose, Cauca, east side of the western Andes, 2200 meters, and west side of the western Andes, 1900 meters, June, 1946; R. San Joaquin, Cauca, 1500 meters, June, 1946.

All of the specimens in the type material except the allotype female were collected by Mr. K. von Sneidern for whom this subspecies is named.

The male genitalia are the same as those of typical *viridiceps*.

#### Pellicia borra, new species

Figure 4

#### MALE

The upper side of both wings is deep blackish brown, and there are faint indications of the usual darker bands. The primaries have three small, white, subapical spots which are semihyaline. The secondaries have a short hair tuft from near the base of the costal margin.

The under side of the primaries is a little paler than the upper side but still very dark except along the inner margin where it is much paler. There is a faint indication of a narrow, submarginal dark line. The three subapical spots are repeated. The secondaries are paler than the primaries and have three dark brown bands; one is submarginal, one is discal, and the other is subbasal.

The upper side of the head and body is blackish brown. On the under side the palpi, the pectus, and the thorax are dark brown, the abdomen is a little paler brown. The antennae are black on both sides.

LENGTH OF ONE PRIMARY WING: 19 mm. Type Material: The holotype male is from La Carmen, 1000 meters, November 30, 1945, Rio Opon region north of Tunja, Boyaca, Colombia, 06° 15′ N. (L. Richter). Paratype: One male from La Barrascosa, 500–1200 meters, December 31, 1945, Rio Opon region north of Tunja, Boyaca, Colombia, 06° 15′ N. (L. Richter).

This insect is another one of the very dark species of *Pellicia* of the *macarius* group which cannot be distinguished from each other except by the male genitalia.

#### Pholisora lorea, new species

Figure 3

#### MALE

The upper side of both wings is brown. The primaries have hazy indications of darker marginal and submarginal bands and a dark spot in the end of the cell. There are three small, white, subapical spots, the middle one under the upper one and the lower one a little outward of the upper two. There is no costal fold. The fringes are concolorous.

The secondaries have rather indistinct darker bands; one is marginal, one is discal, and one is subbasal. The fringes are concolorous.

On the under side the color of both wings is but little paler brown than on the upper side, and there are the same indistinct, darker bands. The subapical spots of the primaries are repeated.

The upper side of the head and body is dark brown. On the under side the palpi and the pectus are dark brown with fulvous scales intermixed. The thorax is dark brown and the abdomen somewhat paler brown. The antennae are missing.

LENGTH OF ONE PRIMARY WING: 18 mm.

Type Material: The holotype male is from Loretoyacu, Amazonas, Colombia, March 29, 1946 (L. Richter.)

The male genitalia are quite similar to those of *Pholisora cupreiceps* Mabille. In the latter species the top of the head, the collar, and the shoulder covers are covered with shining golden yellow scales and the male has a costal fold on the primaries, whereas in *lorea* there are no golden yellow scales on the top of the head, collar, and shoulder covers, and there is no costal fold on the primaries.

#### Dalla quasca, new species

Figure 5

#### MALE

The upper side of the wings is blackish brown. Both primaries and secondaries have fulvous scales on the base. The fringes are paler rufous brown.

The primaries have seven golden fulvous semihyaline spots, of which three are subapical, the lower one the larger; one is in the upper part of the cell a little before the apex; three are discal, in interspaces 1, 2, and 3, the middle one the larger.

The secondaries have a discal orange fulvous spot varying a little in shape but usually somewhat reniform.

On the under side of the primaries the costal margin and apical area are rufous; all the rest of the wings is black. The spots of the upper side are repeated and a little larger. There is a small black dot on the base of the fringes at the end of each vein.

On the under side of the secondaries the abdominal fold is blackish, and the ground color of the rest of the wings is rufous. The discal spot is repeated but it is not so brightly colored as on the upper side, being but little paler than the ground color of the wings, and in some individuals there is a hazy pale spot in the basal third of interspace 7. The discal spot is outwardly bordered by two parallel wavy brown lines which extend from the base of the wings entirely around the discal spot to the abdominal fold. The space between the two lines is sometimes completely filled in with blackish brown so that there appears to be a solid dark band; sometimes there are spots of the ground color in the center of the band and sometimes the entire space between the lines is the same as the ground color of the wings. The outer wavy line is bordered outwardly by pale spots, one in each interspace, of which the lower spot near the anal angle of the wings is the most prominent; these pale spots vary in distinctness and in some individuals are almost absent. The base of the fringes have the black dots as on the primaries.

The upper side of the head, thorax, and abdomen is fulvous and black. On the under side the palpi, pectus, and thorax are yellow fulvous with some blackish scales; the abdomen is orange fulvous. The antennae are black on the upper side, and on the under side they are spotted with fulvous at each joint; the club is pale fulvous and the apiculus is red.

#### **FEMALE**

The female is similar to the male, but the spots of the primaries and the discal spot of the secondaries are a little paler in color.

LENGTH OF ONE PRIMARY WING: Male, 13-15 mm.; female, 14 mm.

Type Material: All from Colombia. The holotype male is from Usaquen, Cundinamarca, 2800-2900 meters, January 8, 1946, "subparamo de" Bogota, 04° 15' N.: the allotype female is from Quasca, January 30, 1946, Cordillera Oriental, 2900-3300 meters. Paratypes: Six males, one is from Usaquen, same data as the holotype: one is from El Chico, 3000 meters, November 20, 1945, "subparamo de" Bogota, 04° 15' N.: one is from La Soledad, 650-1500 meters December 8, 1945, Rio Opon region north of Tunja, Boyaca, 06° 15′ N.: one is from La Lechera, 850 meters, February 15, 1946, Rio Opon region north of Tunja, Boyaca, 06° 15′ N. (L. Richter); one is from San Jose, Cauca, west side of the western Andes, 1900 meters, June, 1946 (K. von Sneidern); one is from Bogota, 1914.

This species resembles Dalla cypselus Felder, the type of which also came from Colombia. On the upper side of the wings there seems to be little, if anything, to separate quasca from cypselus, as they are similarly colored and the maculation varies a little in the same way in both spe-On the under side of the secondaries of cypselus the discal spot is bright fulvous and sharply contrasts with the ground color of the wings, whereas this spot in quasca is either the same color as the ground or but very little paler and it does not sharply The borders of the band surrounding the discal spot of cypselus are not so wavy as those of quasca, and the band itself is solid without pale spots in the center.

The uncus of the male genitalia of cypselus is short with a broad bifid apex; that of quasca is long and tapers to a narrow bifid apex. The claspers of the two species are somewhat similar, but the termination of the lower lobe is different. The aedeagus of quasca has numerous short external teeth before the apex, and in cypselus these are absent.

## Dalla quasca equatoria, new subspecies

#### MALE

This subspecies from Ecuador differs from typical quasca from Colombia in being a little larger. The average length of one primary wing of the males in the type series of quasca is approximately 13.29 mm. and that of the type series of quasca equatoria is approximately 14.90 mm.

On the under side of the secondaries equatoria also differs from typical quasca in the brighter and more mottled appearance of these wings due to the discal spot's being brightly colored and contrasting with the ground color of the wings; the spot in the base of interspace 7 being larger and brighter and the series of spots outwardly bordering the dark band around the discal spot are usually more developed and sometimes extend to the apical part of interspace 7.

LENGTH OF ONE PRIMARY WING: 14.50-15 mm.

Type Material: All from Ecuador. The holotype male is from vicinity of Banos, Rio Blanco, 1700–1900 meters, September 6, 1939. Paratypes: Twelve males, two from vicinity of Banos, Yunguilla, Rio Pastaza, 1700–1800 meters, August 4, 23, 1939; one from Chin Chin Grande, Tungurahua, 1400 meters, October, 1939; two from vicinity of Banos, Rio Blanco, 1700–1900 meters, September 6 and October 5, 1939; one from vicinity of Banos, Eltablou, 2000 meters, October 28, 1938; one from vicinity of Banos, Runtun, 2000–2500 meters, December 19, 1938; five from Ecuador without further data.

The male genitalia of *equatoria* are the same as those of typical *quasca*.

#### Dalla dora, new species

#### Figure 6

#### MALE

The upper side of the wings is blackish brown. The primaries have seven pale yellowish white hyaline spots, of which three are subapical, the middle one the smallest; one is in the upper part of the cell and is small; three are in a discal band, the middle one the largest. The fringes are brown.

The secondaries have a pale yellow, somewhat reniform discal spot. The fringes are brown, paler at the tips than at the base.

On the under side the primaries are a paler shade of brown than on the upper side and somewhat rufous along the costal margin and at the apex. The spots of the upper side are repeated, the one in interspace 1 much enlarged and confluent with the spot in interspace 2. The secondaries are rufous brown. The discal spot of the upper side is repeated and pale yellowish. There is a small, hazy, pale yellowish spot near the anal angle and some scales of the same color extending above it and forming an indistinct submarginal line.

Top of the head and the body is black with some dull fulvous scales intermixed, and when viewed in certain angles of light there is a slight greenish reflection. On the under side the palpi, pectus, and thorax are fulvous brown with some black scales intermixed; the abdomen is fulvous brown. The antennae are missing.

LENGTH OF ONE PRIMARY WING: 14 mm.

Type Material: The holotype male is from Zamora, Ecuador, 1000 meters, October 20, 1941.

This species is very much like Dalla cypselus Felder and the above described Dalla quasca equatoria, from both of which it differs in having much paler spots of the primaries and discal spot of the secondaries. The male genitalia of dora are different from those of both cypselus and quasca.

## Poanes zabulon richteri, new subspecies

#### MALE

On the upper side of the wings this subspecies differs from typical zabulon Boisduval and LeConte in the much broader black border of the primaries and to a somewhat less extent that of the secondaries. On the primaries the fulvous area is so much reduced that in interspace 4 it is merely an isolated spot not filling the base of the interspace.

On the under side of the secondaries the usual band of dark spots in the basal area is entirely missing or at most but faintly indicated, and the row of uneven dark spots crossing the disc from the outer angle to the abdominal fold is more developed and becomes a coherent band.

#### **FEMALE**

The females of this subspecies are not deep blackish brown as are the typical females of zabulon but are much like the males, the fulvous areas perhaps a shade paler. On the under side of the primaries the subapical spots are white and not yellow as in the males, and the whole apical and outer marginal areas are more broadly black. On the under side of the secondaries the abdominal fold is fulvous, and all the rest of the wings is heavily overscaled with rusty reddish, through which the fulvous discal area of the upper side dimly shows and the dark discal band appears as a narrow dark line.

LENGTH OF ONE PRIMARY WING: Male, 14-16 mm.; female, 16 mm.

Type Material: All from Colombia. The holotype male is from Usaquen, Cundinamarca, 2800-3000 meters, January 8, 1946, Rio Opon region north of Tunja, Boyaca, 06° 15′ N. The allotype female is from Bogota, "paramo," 3000 meters, August 14, 1945 (L. Richter). Paratypes: One male from the same locality and date as the holotype; one male from the same locality as the allotype, November 14, 1945 (L. Richter); two males from Cota, near Bogota, August 28, 1938, 2600 meters, and Bogota, September 12, 1938, 10,000 feet (T. Hallinan), all in the collection of the American Museum of Natural History. One male from Bogota in the collection of Kenneth J. Hayward, Tucuman, Argentina.

The male genitalia are the same as those of typical zabulon.

#### Rhinthon sarus, new species

#### Figure 9

#### MALE

The upper side of the wings is dark brown. The primaries have long brown

hairs in the base of interspace 1. The fringes of both wings are fulvous brown, and they may or may not be feebly crossed by dark brown at the end of some of the veins.

On the under side of the primaries of the holotype there is an irregular black band extending from the base of the wings through the cell and almost to the apex of the wings; this band begins wide at the base, narrows through the cell and then widens again; the costal margin is narrowly fulvous brown as far as the end of the cell where it widens a little; the apex and the outer margin are fulvous brown crossed by black veins; the inner angle area below vein 3 is pale brown; there are three or four small subapical spots which are not present on the upper side of the wings. male paratype the black band is extended to the costal margin so that there is no fulvous brown in that area as there is in the holotype.

On the under side of the secondaries there is a broad subbasal black band which is produced outwardly to the outer angle; there is a pale yellowish brown spot on the upper side of vein 8 at the base of the wings, another similar spot in the base of interspace 7, and another one in the upper part of the base of the cell, and another one in the lower part of the apex of the cell. outer half of the costal margin is pale brown, the abdominal fold is purplish brown, and the rest of the anal area of the wings is yellowish white. There is a discal band of small whitish spots in each interspace between veins 1 and 8, the upper spot the larger. In the male paratype the discal band of whitish spots is much less distinct.

The upper side of the head and thorax is dark brown with a green reflection. The collar is internally lined with red, and this shows as a narrow red line extending from behind one eye to behind the other eye. The abdomen is dark brown. On the under side the palpi, pectus, and thorax are grayish; the abdomen is pale yellow brown. The antennae are black on the upper side, with a yellow band at the base of the club; on the under side they are pale brown, and the club is bright yellowish fulvous.

#### **FEMALE**

On the upper side the female is similar to the male, but on the under side it is less brightly colored.

LENGTH OF ONE PRIMARY WING: Male and female. 16 mm.

Type Material: The holotype male and the allotype female are from Massaranduba-Blumenau, State of Santa Catharina, Brazil. Paratype: One male from the Itatiaya Mountains, Campo Bello, State of Rio de Janeiro, Brazil, January.

This species somewhat resembles Rhinthon melius Geyer in the unmarked upper side of the wings and the similar form of the maculation of the under side, but it is easily separated by the red line on the collar which melius lacks. The termination of the claspers of the male genitalia is a little different in the two species.

### Lerodea hoffmanni, new species

Figure 10

#### MALE

The upper side of the wings is fuscous. The primaries have seven small yellowish spots of which three are subapical and very minute; one is in the upper part of the cell a little before the apex; three form a discal band, one each in interspaces 1, 2, and 3, the lower one is very small and indistinct. The fringes are paler brownish on the upper half of the wings and become sordid whitish at the inner angle.

The secondaries are unmarked and have sordid whitish fringes.

On the under side of the wings the ground color is paler than on the upper side. The spots of the upper side of the primaries are repeated except the one in interspace 1. The secondaries have only very faint indications of a few discal spots.

The upper side of the head and body is fuscous. On the under side the palpi, the pectus, and the body are gray. The antennae are black on the upper side, and on the under side they are spotted with whitish at each joint; the club is gray and the apiculus is red.

LENGTH OF ONE PRIMARY WING: 12 mm.

Type Material: The holotype male

is from Colima, Mexico, June, 1918 (C. C. Hoffmann).

This small species somewhat resembles Lerodea labdacus Godman but has quite different genitalia.

#### Vorates paramus, new species

Figure 7

#### MALE AND FEMALE

The upper side of the wings is dark brown, overscaled with dull pale fulvous, and with long, slightly darker fulvous scales from the base of the secondaries extending over the discal area. The primaries have one small, yellowish, semihyaline subapical spot and a discal band of four yellow spots, of which one is on vein 1 and another, just below vein 2, very small and both of them are ill defined; a long narrow semihyaline stripe in interspace 2; and a small semihyaline spot in interspace 3. There is a black stigma of three parts, the upper segment lying under the cell in interspace 2 and filling the area between the semihvaline spot and the edge of the cell, a short stripe under it in the upper part of interspace 1 and followed just below by another stripe which extends to vein 1. The fringes are paler than the ground color of the wings.

The secondaries are unmarked and have fringes as on the primaries.

On the under side of the wings the primaries are rusty brownish on the costal margin and apical area, and there is a narrow stripe of this color in the upper part of the cell; the rest of the wings is blackish. The subapical spot is present but barely visible; there are only a few yellow scales in interspace 1 which do not form a spot; the spots in interspaces 2 and 3 are present but they are paler and duller than on the upper side.

On the under side of the secondaries the abdominal fold is black, and the rest of the wings is rusty brown. There is a white stripe extending along vein 6 from the base of the wings to the outer margin. The fringes are rusty brown outwardly and a little paler at the base.

The top of the head and body is fulvous and fulvous brown intermixed. On the under side the palpi are fulvous, the pectus and thorax are grayish fulvous, the abdomen is pale fulvous with an indistinct darker central line. The antennae are black on the upper side; on the under side they are spotted with fulvous on each joint; the club is black.

LENGTH OF ONE PRIMARY WING: Male and female, 12 mm.

Type Material: All from Colombia. The holotype male and the allotype female are from El Chico, 3000 meters, November 20, 1945, "subparamo de" Bogota, 04° 15' N. Paratypes: One male from Usaquen, Cundinamarca, 2800–2900 meters, January 8, 1946, Rio Opon region north of Tunja, Boyaca, 06° 15' N.; one female from Bogota, "paramo," 3000 meters, November 14, 1945 (L. Richter).

In the superficial appearance of the upper side this species resembles *Vorates decora* Herrich-Schäffer, but it is distinguished by the additional lower segment of the stigma on the primaries of the male and the longer central spot of the discal band of these wings. On the under side of the secondaries *paramus* lacks the yellow veins of *decora* and has the white stripe along vein 6 which *decora* does not have.

#### GENUS ZALOMES, NEW GENUS

PRIMARIES: The costal margin is very straight, being curved only a little near the base of the wings. The outer and inner margins are very straight. The apex of the wings is sharply pointed. The male has a small, black, inconspicuous stigma of three segments: the upper one is sagittate and lies in the base of interspace 2, the next one is a narrow stripe below it and lies along the under side of vein 2, the next one is a very short stripe lying on the upper side of vein 1.

SECONDARIES: These wings are elongate and extend well beyond the tip of the abdomen. The anal angle and the outer margin are evenly rounded.

The third joint of the palpi is very short and conical and almost concealed in the long vestiture of the second joint. The antennae are long, extending to a little beyond the end of the cell. The club is heavy and the apiculus is moderately long. The hind tibiae have only one pair of spurs and some short spines.

Genotype:  $Zalomes\ colobus$ , new species.

The position of this genus is near the genus *Molo* Godman, and the included species superficially resemble members of that genus. The very straight margins of the primaries and the sharply pointed apex and tripartite stigma of those wings, the differently shaped anal angle of the secondaries, and the single pair of spurs on the hind tibiae (there are two pairs in *Molo*) readily distinguish the genus *Zalomes* from the genus *Molo*.

# Zalomes colobus, new species Figure 8

#### MALE AND FEMALE

UPPER SIDE: The ground color of both wings is blackish brown. On the primaries the costal margin from the base of the wings to a little beyond the end of the cell is orange fulvous. There is a single orange fulvous subapical spot in interspace 6 and a discal band of orange fulvous spots extending from the inner margin to just above vein 4; the spots are irregular in size and thus both sides of the band are very uneven. The spot in interspace 2 is larger than any of the others, and this spot and the one above it in interspace 3 are semi-hyaline. The fringes are orange fulvous.

SECONDARIES: There is a broad orange fulvous discal band extending from the abdominal fold to vein 6. The lower side of the discal band is produced a little along the veins and it extends a little downward along the abdominal fold, thus presenting a somewhat erose appearance. The band does not reach the outer margin on vein 6 but is separated from it by a narrow band of the black ground color. There are some orange fulvous hairs in the basal part of the wings. The fringes are orange fulvous and very broad at the anal angle.

UNDER SIDE: On the primaries the semihyaline spots of the discal band in interspaces 2 and 3 are repeated, and the spot in interspace 1 appears as two spots, the lower one paler in color than the upper one, and they are not extended to the inner

margin of the wings as on the upper side. The costal margin, apical area, and the outer margin to just below vein 3 are yellowish a little suffused with fulvous brown. There are three small fulvous brown subapical spots in interspaces 6, 7, and 8 and three similar submarginal spots in interspaces 3, 4, and 5 which may have some black scales in the center. All of the rest of the wings is black. The fringes are fulvous brown.

The secondaries are yellow with a discal band of seven fulvous brown spots which extend in a curved row from near the base of the wings in interspace 7 to the abdominal fold. There is an accumulation of fulvous brown scales in the apex of the cell, but they do not form a defined spot. The abdominal fold is black and bordered on both sides by a narrow band of orange fulvous. The fringes are fulvous brown.

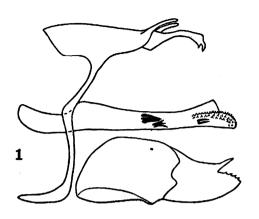
The top of the head and body is fulvous. On the under side the palpi, pectus, and thorax are yellowish; the abdomen is yellowish white. The upper side of the antennae is black with some fulvous scales intermixed; the club is black. On the under side the antennae are yellowish fulvous and the club is fulvous brown.

LENGTH OF ONE PRIMARY WING: Male, 15-16 mm.; female, 15 mm.

Type Material: All from Colombia. The holotype male is from Usaquen, Cundinamarca, 2800–2900 meters, January 8, 1946, "subparamo de" Bogota, 04° 15′ N.; the allotype female is from Bogota, "paramo," 3000 meters, November 13, 1945. One male paratype with the same data as the holotype. All collected by Mr. L. Richter.

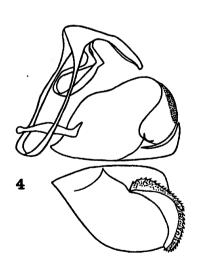
This species resembles Zalomes conspicua (Hayward) from Ecuador which was described in the genus Molo. On the upper side of the wings conspicua differs from colobus in that the discal band of the primaries is more even on its two sides and in that it is extended apically to fuse with the subapical spot, and the two spots in interspaces 2 and 3 are opaque and not semihyaline as in colobus. On the secondaries of conspicua the broad orange fulvous discal band extends to the margin of the wings at the anal angle and is not separated from the margin by a black band as it is in colobus.

The male genitalia of the two species are similar in form but with slight differences in detail, the most prominent being a small but well-defined tooth on the outer margin of the broad apex of the claspers of colobus, which is absent from the claspers of conspicua.



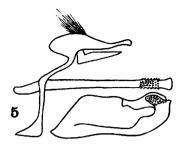


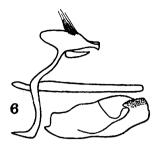




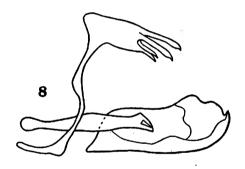
#### MALE GENITALIA OF HESPERIIDAE

- Fig. 1. Phocides johnsoni, new species.
  Fig. 2. Codatractus amazonensis, new species.
  Fig. 3. Pholisora lorea, new species.
  Fig. 4. Pellicia borra, new species.













#### MALE GENITALIA OF HESPERIIDAE

- Fig. 5. Dalla quasca, new species.
  Fig. 6. Dalla dora, new species.
  Fig. 7. Vorates paramus, new species.
  Fig. 8. Zalomes colobus, new species.
  Fig. 9. Rhinthon sarus, new species.
  Fig. 10. Lerodea hoffmanni, new species.